

ABSTRACT OF THE DISCLOSURE

A digitizer pen (100) has a pressure sensor (104) that includes a flexible first printed component (600) and a flexible second printed component (700), on which are printed or otherwise disposed traces of non-carbon ink. The non-carbon ink on at least one of the printed components is a resistive non-carbon ink (606 and 706). The first printed component has a circular sensor section (602) that opposes a circular sensor section (702) of the second printed component. The non-carbon ink on the circular sensor section of at least one of the printed components forms a pattern of pie-shaped traces (711-716) symmetrical about a center (1000) of the circular sensor section. A stylus (130) transfers force from a writing tip (136) to the pressure sensor, at or near the center of the circular sensor section, either directly or through an elastomer (148), and presses the circular sensor sections together. The area of the non-carbon ink on one circular sensor section thereby pressed into intimate contact with the non-carbon ink on the other circular sensor section is proportional to the force. The pressure sensor has two terminals (901 and 902) electrically coupled to the inks on the circular sensor sections such that the electrical resistance between the terminals is proportional to the pressure. The electrical resistance is approximately the same when the stylus transfers a force at the center of the circular sensor section or when the stylus transfers the same force off-centered (1005). An electrical resistance versus force curve (1400) is selectable by preselecting the size or the shape, or both, of the ink traces of the pie-shaped pattern. The abstract is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims pursuant to 37 C.F.R. §172(b).